IN THE CLAIMS

For the convenience of the Examiner, all pending claims of the present Application are shown below in numerical order applying the revised amendment practice of 37 CFR 1.121.

1. **(Original)** A network element for a telecommunications network, comprising:

a port for connection to a transmission line of a telecommunications network;

a plurality of transmission line interfaces, the transmission line interfaces each including a scheduler to transmit traffic in port transmission slots allocated to the transmission line interface;

a storage medium; and

an interface controller stored in the storage medium, the interface controller operable to selectively couple transmission line interfaces to the port and to allocate a disparate portion of port transmission slots to each of the transmission line interfaces coupled to the port.

2. **(Original)** The network element of Claim 1, further comprising:

a plurality of ports for connection to disparate transmission lines of the telecommunications network; and

the interface controller operable to selectively couple at least two of the transmission line interfaces to each port and, for each port, to allocate a disparate portion of port transmission slots to each of the transmission line interfaces coupled to the port.

3. **(Original)** The network element of Claim 1, wherein the network element comprises an asynchronous transport mode (ATM) element.

4. **(Original)** The network element of Claim 1, wherein the network element comprises a telephony switch.

5. **(Original)** The network element of Claim 1, further comprising:

a map of port transmission slots, the map comprising:

a plurality of hierarchical sets of port transmission slots;

the hierarchical sets comprising a plurality of parent sets each having its port transmission slots divided between a plurality of child sets;

the child sets comprising interleaved port transmission slots; and

the interface controller further operable to selectively allocate to each of the transmission line interfaces coupled to the port a disparate hierarchical set of the port transmission slots from the map.

6. **(Original)** The network element of Claim 5, the hierarchical sets each further comprising substantially evenly spaced port transmission slots.

7. **(Original)** The network element of Claim 2, further comprising:

a map of port transmission slots for each of the ports, the maps each comprising:

a plurality of hierarchical sets of port transmission slots;

the hierarchical sets comprising a plurality of parent sets each having its port transmission slots divided between a plurality of child sets;

the child sets comprising interleaved port transmission slots; and

the interface controller further operable to selectively allocate to each of the transmission line interfaces coupled to a port a disparate hierarchical set of port transmission slots from the map for the port.

8. **(Original)** The network element of Claim 1, further comprising:

the interface controller operable to generate a map of port transmission slots, the map comprising:

a plurality of hierarchical sets of port transmission slots;

the hierarchical sets comprising a plurality of parent sets each having its port transmission slots divided between a plurality of child sets;

the child sets comprising interleaved port transmission slots; and

the interface controller operable to selectively allocate to each of the transmission line interfaces coupled to the port a disparate hierarchical set of port transmission slots from the map.

9. **(Original)** The network element of Claim 2, further comprising:

the interface controller operable to generate a map of port transmission slots for each of the ports, the maps each comprising:

a plurality of hierarchical sets of port transmission slots;

the hierarchical sets comprising a plurality of parent sets each having its port transmission slots divided between a plurality of child sets;

the child sets comprising interleaved port transmission slots; and

the interface controller operable to selectively allocate to each of the transmission line interfaces coupled to a port a disparate hierarchical set of port transmission slots from the map for the port.

10. **(Previously Presented)** A telecommunications system, comprising:

a first network element coupled to a remote second network element via a transmission line;

the first network element comprising:

a port connected to the transmission line;

a plurality of transmission line interfaces, the transmission line interfaces each including a scheduler to transmit traffic in port transmission slots allocated to the transmission line interface;

a storage medium; and

an interface controller stored in the storage medium, the interface controller operable to selectively couple transmission line interfaces to the port and to allocate a disparate portion of port transmission slots to each of the transmission line interfaces coupled to the port.

11. **(Original)** The telecommunications system of Claim 10, further comprising:

a map of port transmission slots, the map comprising:

a plurality of hierarchical sets of port transmission slots;

the hierarchical sets comprising a plurality of parent sets each having its port transmission slots divided between a plurality of child sets;

the child sets comprising interleaved port transmission slots; and

the interface controller further operable to selectively allocate to each of the transmission line interfaces coupled to the port a disparate hierarchical set of port transmission slots from the map.

12. **(Original)** The telecommunications system of Claim 11, the hierarchical sets each further comprising substantially evenly spaced port transmission slots.

13. **(Original)** The telecommunications system of Claim 10, further comprising:

the interface controller operable to generate a map of port transmission slots, the map comprising:

a plurality of hierarchical sets of port transmission slots;

the hierarchical sets comprising a plurality of parent sets each having its port transmission slots divided between a plurality of child sets;

the child sets comprising interleaved port transmission slots; and

the interface controller operable to selectively allocate to each of the transmission line interfaces coupled to the port a disparate hierarchical set of port transmission slots from the map.

14. **(Original)** A method for transmitting traffic in a transmission line, comprising:

coupling a plurality of schedulers to a port for a transmission line; and

using each of the schedulers to transmit in a portion of port transmission slots allocated to the scheduler traffic designating a virtual tunnel defined by the portion of port transmission slots.

15. **(Original)** The method of Claim 14, further comprising using at least one of the schedulers to transmit dynamic traffic in the portion of port transmission slots.

16. **(Original)** The method of Claim 14, further comprising using at least one of the schedulers to transmit a combination of dynamic and dedicated traffic in the portion of port transmission slots.

17. **(Original)** The method of Claim 14, further comprising using at least one of the schedulers to transmit available bit rate (ABR) asynchronous transport mode (ATM) traffic in the portion of port transmission slots.

18. **(Original)** The method of Claim 14, further comprising using at least one of the schedulers to transmit unspecified bit rate (UBR) asynchronous transport mode (ATM) traffic in the portion of the port transmission slots.

19. **(Original)** The method of Claim 14, further comprising selectively allocating to each of the schedulers the portion of port transmission slots.

20. **(Original)** The method of Claim 14, further comprising separately queuing traffic for each scheduler.

21. **(Previously Presented)** A method for transmitting traffic in a virtual tunnel of a transmission line, comprising:

receiving a request to transmit specified traffic in a virtual tunnel having a bandwidth;

identifying an hierarchical set of port transmission slots providing at least the bandwidth;

allocating the hierarchical set of port transmission slots to one of a plurality of transmission line interfaces, each transmission line interface having a corresponding scheduler coupled thereto; and

using the scheduler of the one of the plurality of transmission line interfaces to transmit the specified traffic in the hierarchical set of port transmission slots.

22. **(Previously Presented)** The method of Claim 21, further comprising coupling a queue to the scheduler of the one of the plurality of transmission line interfaces to queue the specified traffic for transmission by the scheduler.

23. **(Previously Presented)** The method of Claim 21, further comprising:

selecting a plurality of substantially evenly spaced port transmission slots as an initial set of transmission slots;

dividing the initial set of transmission slots into a plurality of child sets having interleaved first port transmission slots;

recursively dividing each child set into a plurality of lower level child sets having interleaved second port transmission slots until child sets in a lowest level each correspond to a base transmission rate;

storing the initial set and the child sets as a map including a plurality of hierarchical sets; and

wherein the hierarchical set of port transmission slots is selected from the map.

24. **(Previously Presented)** The method of Claim 21, further comprising using the scheduler of the one of the plurality of transmission line interfaces to transmit specified dynamic traffic in the hierarchical set of port transmission slots.

25. **(Previously Presented)** The method of Claim 21, further comprising using the scheduler of the one of the plurality of transmission line interfaces to a combination of dedicated and dynamic traffic in the hierarchical set of port transmission slots.

26. **(Canceled)**

27. **(Canceled)**

28. **(Canceled)**

29. **(Canceled)**

30. **(Canceled)**

31. **(Canceled)**

32. **(Canceled)**